Petition for Exemption

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Applicable Regulation

International Aviation Services, LLC (IAS), U4IX062K, is seeking relief from the Federal Aviation Administration's (FAA) interpretation of the word classroom in **14 CFR §61.156(a)**, which implies in-person instruction for the completion of academic training. 14 CFR §61.156(a) states:

> 14 CFR §61.156 - Training requirements: Airplane category - multiengine class rating or airplane type rating concurrently with airline transport pilot certificate.
> (a) Academic training. The applicant for the knowledge test must receive at least 30 hours of classroom instruction that includes the following:
> (1) At least 8 hours of instruction on aerodynamics including high altitude operations;
> (2) At least 2 hours of instruction on meteorology, including adverse weather phenomena and weather detection systems; and
> (3) At least 14 hours of instruction on air carrier operations, including the following areas:
> (i) Physiology;
> (ii) Communications;
> (iii) Checklist philosophy;
> (iv) Operational control;
> (v) Minimum equipment list/configuration deviation list;
> (vi) Ground operations;
> (vii) Turbine engines;
> (viii) Transport category aircraft performance;
> (ix) Automation, navigation, and flight path warning systems.
> (4) At least 6 hours of instruction on leadership, professional development, crew resource management, and safety culture.

Extent and Reason for Relief from Regulation

IAS is authorized to conduct ATP-CTP course training under 14 CFR Part 142. The approved course meets all requirements set forth in 14 CFR §61.156 and the current version of Advisory Circular (AC) 61-138. IAS is proposing the permanent use of video teleconferencing (VTC) for the academic portion of the ATP-CTP course in lieu of the FAA interpretation of the word classroom, which implies in-person instruction. Because the requirement for the academic training to be accomplished in a physical classroom is not clearly defined in the regulations, IAS is requesting permanent relief from the FAA interpretation of the word classroom.

Due to the worldwide Coronavirus (COVID-19) outbreak, the FAA granted IAS temporary approval to conduct remote sited – virtual ground training on June 26th, 2020. IAS has since met all the conditions and limitations of this approval and trained nearly 200 pilots via the remote learning method. IAS collected student feedback to ensure continuous improvement of the program. See Attachment 1 for the complete results. 132 virtual training participants answered the survey, with 94% of participants being satisfied or very satisfied with the overall virtual training experience. All participants either achieved or mostly achieved their learning objectives and 97.7% of students were able to bridge their skill/knowledge gaps. Although 32.6% of participants stated the course could be improved, most of the written feedback was administrative in nature (e.g., video quality/length). Most participants stated the virtual delivery method (i.e., Zoom) was effective and all participants would recommend the IAS virtual training to others. Overall, there have not been any student failures. These results have been communicated with the FAA every 3 months to ensure student knowledge retention and continuous improvement of the program.

The effectiveness of the ATP-CTP remote sited – virtual ground training has proven to be of equal level of quality to that of in-person instruction. Due to these results, IAS is seeking relief from the FAA interpretation of the word classroom in 14 CFR §61.156(a), which implies in-person instruction for the completion of academic training.

Public Benefit

The public benefit of conducting the academic portion of the ATP-CTP course is significant and includes the following advantages:

- By reducing the amount of travel imposed on students, IAS is reducing the students' exposure to health risks and, in turn, protecting its instructors from unnecessary contact.
- Students have greater accessibility to virtual training, as it can be attended from anywhere with the approved equipment and in an appropriate environment.
- The cost of training to the public is significantly lower while being conducted virtually, as it removes substantial expenses primarily related to travel (e.g., flight, hotel, car).
- Virtual learning reduces barriers for students with limited resources and flexibility.
- Virtual learning provides greater access to learning for military pilots who cannot leave their bases.
- Due to the reduced class size and a smaller student to instructor ratio (i.e., 6:1), students receive more personalized instruction and, in turn, higher quality of learning.
- IAS has implemented mitigation strategies to ensure students receive the highest quality of learning (i.e., Internal Evaluation Program and post-training survey).

Due to the economic nature of the times and the current COVID-19 situation, students are seeking relief by limiting their time at training centers to minimize physical exposure and economize on travel costs. IAS has been following Centers for Disease Control and Prevention (CDC) guidelines to ensure the safety of all students. However, with respect to savings, there is only so much IAS can do from an economic and competitive standpoint. At some point, other measures must be addressed to reduce the out-of-pocket costs associated with ATP-level certification without jeopardizing safety and achieve identical, if not better, level of safety as is intended by the governing rule.

IAS is not asking for economic relief as a basis for this exemption. The cost to IAS to perform the academic training virtually is more significant, as the company is limited to reduced class sizes. At this point in time, any savings given to aspiring ATP candidates will increase their willingness to participate in an already large out-of-pocket expense for ATP-level certification. The public at large will benefit from the fact that IAS contributes to the retention and improvement of the current number of ATP candidates.

Impact on Aviation Safety

The exemption sought in this petition will provide for the same, if not better, level of safety to the existing rule. The following safety controls have been put in place by IAS to provide a superior virtual training environment to its students.

- IAS uses the Zoom software to conduct the online virtual ground training. Zoom is a cloud-based video conferencing platform that can be used for video conferencing meetings, virtual training, audio conferencing, webinars, meeting recordings, and live chat. Zoom allows individuals to train and work together productively "face-to-face" when meeting in-person is not possible. This makes training remotely much more interactive, which is essential to help users feel and stay connected.
- IAS requires the following elements for students to participate in remote sited virtual ground training:
    - Access to a computer or tablet
    - High speed Internet
    - Webcam capable of high-quality video
    - Distraction free environment
    - Ability to succeed in a non-traditional classroom
- Upon enrollment, IAS requires trainees to document their pilot information, experience, contact information, etc. IAS also obtains a government issued photo ID, which is provided to the instructors during training for verification of the photo ID against the participants in the virtual ground training.
- IAS provides trainees enrolled in virtual training with a virtual ground training welcome document. This welcome document includes details to ensure successful completion of their ground training portion of the approved curriculum. The packet includes at least the following items:
    - Training times
    - How the virtual training meeting invite will be provided
    - Virtual instructor's contact details
    - Trainee identity verification requirements
    - IT support contact details for technical issues
    - Setup instructions for downloading, installing, and using the Zoom software
    - Recommendations and requirements for preparing an environment conducive to training
    - Expectations for completing the simulator portion of a training curriculum
    - Class size limit
    - Trainee expectations and other pertinent requirements

- Online virtual ground training is held during an acceptable time for the student and administrator. IAS attempts to schedule remote virtual training during the hours of 8:00 AM – 8:00 PM.
- The administrator is provided a weekly virtual ground training schedule before the commencement of any remote site virtual ground training and access to all virtual ground schools in the same manner as a trainee attending the course.
- No testing, checking, or systems integration training takes place during remote site virtual ground training. All forms of official documented validation tests or exams are conducted in-person at an IAS approved principal or satellite facility.
- At no time does any virtual ground school have more than six (6) students participating in a curriculum at the same time.
- A good quality internet speed is important to the effectiveness of instruction. Instructors continuously monitor the quality of video for trainees. Instructors also advise the trainees to make them aware of any connectivity deficiencies. If a prompt resolution cannot be made to increase the connection quality, the trainees are rescheduled for any training modules they are unable to attend due to decreased connectivity.
- All training curricula and courseware used by the instructor during virtual ground training is the same as that which is approved for use in the in-person ground training environment. Modification to the courseware cannot be made unless it is specifically approved by the administrator.
- IAS instructors delivering the virtual ground training are actively scanning and are aware of the trainee environment. Instructors look for any indications of an environment which does not allow the trainee to focus their complete attention on the virtual ground training. If at any time the instructor determines the trainee environment is not conducive to learning, the instructor stops the training for that trainee. A reasonable time is provided for the trainee to re-establish an appropriate training environment. If the trainee is unable to establish an appropriate training environment, the instructor postpones training for that trainee. Any missed modules are completed with the instructor when a proper training environment can be established.
- The IAS Director of Standards (DOS) ensures virtual training meets or exceeds traditional curriculum standards and curriculum objectives.
- Instructors are required to follow the procedures and policies that are approved in the IAS manuals and by relevant regulations. The same procedures that apply to in-person training, also apply to virtual ground training. Quality control methods are utilized the same as if training were in a principal or satellite training location in accordance with the approved IAS manuals and regulatory requirements. These methods include ability to provide feedback from instructors or trainees regarding course deficiencies, technical difficulties, student progress, etc.
- After curriculum enrollment, IAS provides trainees and instructors with an internet link to an online survey. The survey can be completed at any time during or after curriculum instruction. Any concerns that are submitted are immediately addressed by the instructor, DOS, or IAS management, as appropriate.

- IAS management periodically conducts random observations to ensure instruction is being administered in accordance with the policies and procedures outlined in the approved IAS manuals, regulatory required items, and the approved IAS training curriculum. Any concerns regarding the quality or effectiveness of instruction shall be immediately brought to the attention of the DOS.
- When selecting instructors designated as virtual ground training qualified, IAS management uses the following questions to determine abilities to successfully instruct in a virtual setting.
  - Is the instructor:
    - Self-motivation/self-starter?
    - Familiar, competent, and capable of effectively using a computer and the Internet?
    - Resourceful and actively seek answers and solutions to questions and problems?
  - Does the instructor have:
    - Good organization and time-management skills?
    - Familiarity with Web browsers and an email program?
    - Some familiarity with Web-based interactions such as email, discussion boards, listservs, and chat rooms?
    - Proficiency with typing and word processing?
    - Experience in successful Internet searches using a variety of search engines?
- To maintain sufficient oversight of instructors, the training center only allows those instructors who are specifically trained on the remote site virtual ground training procedures. IAS may also choose to designate a moderator to support and assist the instructor with facilitation of instruction.

Summary

International Aviation Services, LLC (IAS), U4IX062K, is seeking relief from the Federal Aviation Administration's (FAA) interpretation of the word classroom in 14 CFR §61.156(a), which implies in-person instruction for the completion of academic training.

Additional Information

Online distance learning through virtual training meets the needs of an ever-growing population of students who may be unable to participate in traditional classroom settings due to certain circumstances. These learners include those unable to attend traditional classes, especially when due to a local or national emergency.

Online virtual ground school provides an excellent method of course delivery, allowing for accessibility to instruction at anytime from anywhere. Trainees find the online environment an appropriate alternative, allowing them to meet curriculum requirements, stay safe, and still maintain an equal level of education.

The ability to access a course from any computer with Internet access, is a tremendous incentive for many of today's trainees, especially due to extenuating circumstances. Some of the main advantages of online learning include:

- Safety: In the situation of a local/national emergency (e.g., pandemic, hurricane, etc.), virtual ground training provides a means for the training center to continue providing ground instruction to its trainees.
- Convenience: Convenient access from any online device accommodates the trainees' diverse schedules, allowing for no unnecessary commuting.
- Enhanced Learning: Research shows increased depth of understanding and retention of course content through the virtual learning method. It allows for more meaningful discussions, as well as places emphasis on writing skills, technology skills, independence, and self-discipline.
- Leveling of the Playing Field: Trainees can take more time to think and reflect before communicating.
- Interaction: Increased trainee-to-teacher and trainee-to-trainee interaction and discussion allows for a more student-centered learning environment. It also allows for less passive listening and more active learning. A greater sense of connectedness.
- Innovative Teaching: Trainee-centered approaches with an increased variety and creativity of learning activities. Address different learning styles. Changes and improvements can translate to ground courses.
- Improved Administration: Instructors have time to examine trainee work more thoroughly. They can document and record online interactions, as well as assess the interactions.
- Maximize Physical Resources: Lessen demand on limited training center availability.

Sincerely,

David Kuhn, CEO

INTERNATIONAL
AVIATION SERVICES

Attachment 1

[02] Virtual Training Course Evaluation

Questions   Responses   132

132 responses

Accepting responses

Summary   Question   Individual

📊 Insights

Average	Median	Range
0 / 0 points	0 / 0 points	0 - 0 points

Total points distribution

Enrolled Curriculum Information

Enrolled Curriculum

132 responses

- ● ATP CTP
- ● 61.58 Recurrent Standard Specialty Curriculum
- ● 61.58 Recurrent Accelerated Specialty Curriculum
- ● 61.153 ATP Initial Type Rating - Standard Core Curriculum
- ● 61.153 ATP Initial Type Rating - Accel...
- ● 61.63 Commercial Initial Type Rating -...
- ● 61.63 Commercial Initial Type Rating -...

30.3%

62.9%

IAS Virtual Ground Course Feedback

How satisfied are you with your overall online virtual training experience? (1=Dissatisfied 5=Very Satisfied)

132 responses

Questions   Responses   132   Settings

- 1 Very Dissatisfied
- 2 Dissatisfied
- 3 Average
- 4 Satisfied
- 5 Very Satisfied

65.2%
28.8%

Did you achieve your personal learning goals or objectives?

132 responses

- Yes
- No
- Mostly

90.9%
9.1%

Were you able to bridge skill or knowledge gaps?

132 responses

- Yes
- No

97.7%

Were you able to bridge skill or knowledge gaps?

132 responses

- Yes
- No

97%

Were you able to connect with the content presented by your instructor?

132 responses

- Yes
- No

100%

Was there enough interactivity?

132 responses

- Yes
- No

97.7%

Did you have any technical issues?

132 responses

- Yes
- No

81.1%

18.9%

Was the course too challenging?

132 responses

- Yes
- No

96.2%

With regards to the VIRTUAL TRAINING METHOD ONLY (Zoom, Instructor Interaction, etc.), do you feel the course could be improved?

132 responses

- Yes
- No

67.4%

32.6%

General Virtual Course Feedback Questions

Virtual Course Technical Issues

Virtual Course Improvement Suggestions

With regards to the VIRTUAL TRAINING METHOD ONLY (Zoom, instructor interaction, etc.) , Not the courseware itself, how do you think we can improve our virtual delivery method?

105 responses

I believe it satisfied my expectations completely

I thought it was a very structured program that was interesting, our instructor did a great job keeping us engage and made it very enjoyable, the coordination between IAS and TAS was great and the course ran very smoothly

All good for me

The volume on some of the videos needs to be improved

I think it was very well structured and presented

I think this training method is good and with the current pandemic it is the best option.

I think the current Zoom interaction works extremely well.

None

Adding the missing videos to the BOX account

Instructor Information

Instructors

132 responses

Please provide your feedback and suggestions

Do you have any other comments or suggestions that we have not covered in this survey?

94 responses

No

no

No, it was a great program

None

Highly recommend instructor XXX (5/5), as he gave the right information according to the overall group flying experienceAnd 2 particular videos during the course (Children of Magenta and NTSB video on day 4) was very beneficial if you could addimilar type of videos would be of great help.

Nil

Nothing else

Time frame is just right. Not to short to skip information and long enough to keep you constantly engaged

Would you recommend IAS virtual training to others?

132 responses

● Yes
● No

100%